WEST Search History

DATE: Thursday, June 05, 2003

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB; PLUR=YES; OP=ADJ			
L6	L5 and dna methyltransferase	5	L6
L5	L4 and dna methylase	26	L5
L4	L3 and transgenic	376	L4
L3	L2 and (gene or cdna or coding sequence)	540	L3
L2	methyltransferase and (corn or maize or zea mays)	592	L2
L1	zmet2a	0	L1

END OF SEARCH HISTORY

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PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


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 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2  Apr 08  "Ask CAS" for self-help around the clock
 NEWS  3  Apr 09  BEILSTEIN: Reload and Implementation of a New Subject Area
 NEWS  4  Apr 09  ZDB will be removed from STN
 NEWS  5  Apr 19  US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
 NEWS  6  Apr 22  Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
 NEWS  7  Apr 22  BIOSIS Gene Names now available in TOXCENTER
 NEWS  8  Apr 22  Federal Research in Progress (FEDRIP) now available
 NEWS  9  Jun 03  New e-mail delivery for search results now available
 NEWS 10  Jun 10  MEDLINE Reload
 NEWS 11  Jun 10  PCTFULL has been reloaded
 NEWS 12  Jul 02  FOREGE no longer contains STANDARDS file segment
 NEWS 13  Jul 22  USAN to be reloaded July 28, 2002;
                  saved answer sets no longer valid
 NEWS 14  Jul 29  Enhanced polymer searching in REGISTRY
 NEWS 15  Jul 30  NETFIRST to be removed from STN
 NEWS 16  Aug 08  CANCERLIT reload
 NEWS 17  Aug 08  PHARMAMarketLetter(PHARMAML) - new on STN
 NEWS 18  Aug 08  NTIS has been reloaded and enhanced
 NEWS 19  Aug 19  Aquatic Toxicity Information Retrieval (AQUIRE)
                  now available on STN
 NEWS 20  Aug 19  IFIPAT, IFICDB, and IFIUDB have been reloaded
 NEWS 21  Aug 19  The MEDLINE file segment of TOXCENTER has been reloaded
 NEWS 22  Aug 26  Sequence searching in REGISTRY enhanced
 NEWS 23  Sep 03  JAPIO has been reloaded and enhanced

 NEWS EXPRESS  February 1 CURRENT WINDOWS VERSION IS V6.0d,
               CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
               AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
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FILE 'HOME' ENTERED AT 13:01:47 ON 14 SEP 2002

=> file agricola caplus biosis
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

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FILE 'BIOSIS' ENTERED AT 13:01:58 ON 14 SEP 2002
COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC.(R)

=> s zmet2a
L1            2 ZMET2A

=> dup rem l1
PROCESSING COMPLETED FOR L1
L2             2 DUP REM L1 (0 DUPLICATES REMOVED)

=> d 1-2 ti

L2   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2002 ACS
TI   Analysis of zmet2a: A maize methyltransferase essential for
     CpNpG methylation

L2   ANSWER 2 OF 2  CAPLUS  COPYRIGHT 2002 ACS
TI   Class II DNA methyltransferases of maize


=> d 1-2 so

L2   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2002 ACS
SO   (2000) 106 pp.  Avail.: UMI, Order No. DA9960383
     From: Diss. Abstr. Int., B 2000, 61(1), 68

L2   ANSWER 2 OF 2  CAPLUS  COPYRIGHT 2002 ACS
SO   PCT Int. Appl., 103 pp.
     CODEN: PIXXD2


=> d ab

L2   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2002 ACS
AB   Unavailable


=> d 2 pi

L2   ANSWER 2 OF 2  CAPLUS  COPYRIGHT 2002 ACS
     PATENT NO.          KIND  DATE          APPLICATION NO.  DATE
     --------------      ----  --------      ---------------  --------
PI   WO 2000053732       A2    20000914      WO 2000-US6456   20000310
     WO 2000053732       A3    20001221
         W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
```

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        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
            CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    EP 1159407        A2   20011205       EP 2000-917875   20000310
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO


=> s ((papa, c?) or (papa c?))/au
L3          163 ((PAPA, C?) OR (PAPA C?))/AU

=> s l3 and methyltransferase
L4            5 L3 AND METHYLTRANSFERASE

=> dup rem l4
PROCESSING COMPLETED FOR L4
L5             3 DUP REM L4 (2 DUPLICATES REMOVED)

=> d 1-3 ti

L5   ANSWER 1 OF 3  AGRICOLA                              DUPLICATE 1
TI   Maize chromomethylase Zea methyltransferase2 is required for CpNpG
     methylation.

L5   ANSWER 2 OF 3  CAPLUS  COPYRIGHT 2002 ACS
TI   Analysis of zmet2a: A maize methyltransferase essential for
     CpNpG methylation

L5   ANSWER 3 OF 3  CAPLUS  COPYRIGHT 2002 ACS
TI   Class II DNA methyltransferases of maize


=> d so

L5   ANSWER 1 OF 3  AGRICOLA                              DUPLICATE 1
SO   The Plant cell, Aug 2001. Vol. 13, No. 8. p. 1919-1928
     Publisher: [Rockville, MD : American Society of Plant Physiologists,
     c1989-
     CODEN: PLCEEW; ISSN: 1040-4651


=> d ab

L5   ANSWER 1 OF 3  AGRICOLA                              DUPLICATE 1
AB   A cytosine DNA methyltransferase containing a chromodomain, Zea
     methyltransferase2 (Zmet2), was cloned from maize. The sequence of ZMET2
     is similar to that of the Arabidopsis chromomethylases CMT1 and CMT3, with
     C-terminal motifs characteristic of eukaryotic and prokaryotic DNA
     methyltransferases. We used a reverse genetics approach to determine the
     function of the Zmet2 gene. Plants homozygous for a Mutator transposable
     element insertion into motif IX had a 13% reduction in methylated
     cytosines. DNA gel blot analysis of these plants with methylation-
     sensitive restriction enzymes and bisulfite sequencing of a 180-bp knob
     sequence showed reduced methylation only at CpNpG sites. No reductions in
     methylation were observed at CpG or asymmetric sites in heterozygous or
     homozygous mutant plants. Our research shows that chromomethylase Zmet2 is
     required for in vivo methylation of CpNpG sequences.


=> d au

L5   ANSWER 1 OF 3  AGRICOLA                              DUPLICATE 1
AU   Papa, C.M.; Springer, N.M.; Muszynski, M.G.; Meeley, R.;
     Kaeppler, S.M.
```

```
=> s ((kaeppler s?) or (kaeppler, s?))/au
L6          89 ((KAEPPLER S?) OR (KAEPPLER, S?))/AU

=> l6 and methyltransferase
L6 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l6 and methyltransferase
L7           8 L6 AND METHYLTRANSFERASE

=> dup rem l7
PROCESSING COMPLETED FOR L7
L8           4 DUP REM L7 (4 DUPLICATES REMOVED)

=> d 1-4 ti

L8   ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2002 ACS
TI   Nucleic acid and amino acid sequences encoding a de novo DNA
     methyltransferase from corn and the use of the
     methyltransferase for altering a target gene methylation in a
     plant

L8   ANSWER 2 OF 4  AGRICOLA                              DUPLICATE 1
TI   Maize chromomethylase Zea methyltransferase2 is required for CpNpG
     methylation.

L8   ANSWER 3 OF 4  CAPLUS  COPYRIGHT 2002 ACS
TI   Class II DNA methyltransferases of maize

L8   ANSWER 4 OF 4  AGRICOLA                              DUPLICATE 2
TI   Conserved plant genes with similarity to mammalian de novo DNA
     methyltransferases.


=> d pi

L8   ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2002 ACS
     PATENT NO.       KIND  DATE           APPLICATION NO.   DATE
     ---------------  ----  --------       ---------------   --------
PI   WO 2001053470     A2   20010726       WO 2001-US2229    20010123
     WO 2001053470     A3   20011220
         W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 2002049996     A1   20020425       US 2001-767536    20010123


=> d 4 ab

L8   ANSWER 4 OF 4  AGRICOLA                              DUPLICATE 2
AB   DNA methylation plays a critical role in controlling states of gene
     activity in most eukaryotic organisms, and it is essential for proper
     growth and development. Patterns of methylation are established by de novo
     methyltransferases and maintained by maintenance methyltransferase
```

activities. The Dnmt3 family of de novo DNA methyltransferases has recently been characterized in animals. Here we describe DNA **methyltransferase** genes from both Arabidopsis and maize that show a high level of sequence similarity to Dnmt3, suggesting that they encode plant de novo methyltransferases. Relative to all known eukaryotic methyltransferases, these plant proteins contain a novel arrangement of the motifs required for DNA **methyltransferase** catalytic activity. The N termini of these methyltransferases contain a series of ubiquitin-associated (UBA) domains. UBA domains are found in several ubiquitin pathway proteins and in DNA repair enzymes such as Rad23, and they may be involved in ubiquitin binding. The presence of UBA domains provides a possible link between DNA methylation and ubiquitin/proteasome pathways.

```
=> d 4 so

L8   ANSWER 4 OF 4  AGRICOLA                              DUPLICATE 2
SO   Proceedings of the National Academy of Sciences of the United States of
     America, Apr 25, 2000. Vol. 97, No. 9. p. 4979-4984
     Publisher: Washington, D.C. : National Academy of Sciences,
     CODEN: PNASA6; ISSN: 0027-8424


=> s zmet2?
L9            5 ZMET2?

=> dup rem l9
PROCESSING COMPLETED FOR L9
L10            3 DUP REM L9 (2 DUPLICATES REMOVED)

=> d 1-3 ti

L10  ANSWER 1 OF 3  AGRICOLA                              DUPLICATE 1
TI   Maize chromomethylase Zea methyltransferase2 is required for CpNpG
     methylation.

L10  ANSWER 2 OF 3  CAPLUS  COPYRIGHT 2002 ACS
TI   Analysis of zmet2a: A maize methyltransferase essential for
     CpNpG methylation

L10  ANSWER 3 OF 3  CAPLUS  COPYRIGHT 2002 ACS
TI   Class II DNA methyltransferases of maize


=> d 2 so

L10  ANSWER 2 OF 3  CAPLUS  COPYRIGHT 2002 ACS
SO   (2000) 106 pp.  Avail.: UMI, Order No. DA9960383
     From: Diss. Abstr. Int., B 2000, 61(1), 68


=> s (corn or maize or zea) and methyltransferase
L11          188 (CORN OR MAIZE OR ZEA) AND METHYLTRANSFERASE

=> s l11 and (gene or cdna or coding region)
L12          120 L11 AND (GENE OR CDNA OR CODING REGION)

=> s l12 and dna methyltransferase
L13           17 L12 AND DNA METHYLTRANSFERASE

=> dup rem l13
PROCESSING COMPLETED FOR L13
L14            12 DUP REM L13 (5 DUPLICATES REMOVED)
```

=> d 1-12 ti

L14 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS
TI Zinc finger domain recognition code for use in designing DNA binding proteins

L14 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2002 ACS
TI Reverse genetic strategy for identifying functional mutations, TILLING (targeting induced local lesions in genomics) that combines chemical mutagenesis with a sensitive mutation detection

L14 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS
TI Nucleic acid and amino acid sequences encoding a de novo **DNA** **methyltransferase** from **corn** and the use of the **methyltransferase** for altering a target **gene** methylation in a plant

L14 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2002 ACS
TI Usage of zinc finger protein to regulate **gene** expression and metabolic pathways in plants and creation of five zinc finger proteins

L14 ANSWER 5 OF 12 AGRICOLA DUPLICATE 1
TI **Maize** chromomethylase **Zea** methyltransferase2 is required for CpNpG methylation.

L14 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS
TI Selection and orientation of adjacent genes influences DAM-mediated male sterility in transformed **maize**

L14 ANSWER 7 OF 12 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Hypomethylation of the c-Myc **gene** by the peroxisome proliferator, Wy-14,643.

L14 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2002 ACS
TI Class II DNA methyltransferases of **maize**

L14 ANSWER 9 OF 12 AGRICOLA DUPLICATE 2
TI Conserved plant genes with similarity to mammalian de novo DNA methyltransferases.

L14 ANSWER 10 OF 12 AGRICOLA DUPLICATE 3
TI Expression of ZmMET1, a **gene** encoding a **DNA** **methyltransferase** from **maize**, is associated not only with DNA replication in actively proliferating cells, but also with altered DNA methylation status in cold-stressed quiescent cells.

L14 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2002 ACS
TI Cloning and characterization of the 5-methylcytosine **methyltransferase** **gene** in **maize** (**zea** mays) plants and tissue cultures

L14 ANSWER 12 OF 12 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI CHANGES IN **DNA METHYLTRANSFERASE** INDUCED BY TREATMENT WITH N-2 ACETYLAMINOFLUORENE.

=> d 3 so

L14 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS
SO PCT Int. Appl., 50 pp.
CODEN: PIXXD2

=> d 3 pi

L14 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001053470	A2	20010726	WO 2001-US2229	20010123
	WO 2001053470	A3	20011220		
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2002049996	A1	20020425	US 2001-767536	20010123

=> d 5 so

L14 ANSWER 5 OF 12 AGRICOLA DUPLICATE 1
SO The Plant cell, Aug 2001. Vol. 13, No. 8. p. 1919-1928
Publisher: [Rockville, MD : American Society of Plant Physiologists, c1989-
CODEN: PLCEEW; ISSN: 1040-4651

=> d 9 ab

L14 ANSWER 9 OF 12 AGRICOLA DUPLICATE 2
AB DNA methylation plays a critical role in controlling states of **gene** activity in most eukaryotic organisms, and it is essential for proper growth and development. Patterns of methylation are established by de novo methyltransferases and maintained by maintenance **methyltransferase** activities. The Dnmt3 family of de novo DNA methyltransferases has recently been characterized in animals. Here we describe **DNA methyltransferase** genes from both Arabidopsis and **maize** that show a high level of sequence similarity to Dnmt3, suggesting that they encode plant de novo methyltransferases. Relative to all known eukaryotic methyltransferases, these plant proteins contain a novel arrangement of the motifs required for **DNA methyltransferase** catalytic activity. The N termini of these methyltransferases contain a series of ubiquitin-associated (UBA) domains. UBA domains are found in several ubiquitin pathway proteins and in DNA repair enzymes such as Rad23, and they may be involved in ubiquitin binding. The presence of UBA domains provides a possible link between DNA methylation and ubiquitin/proteasome pathways.

=> d 9 so

L14 ANSWER 9 OF 12 AGRICOLA DUPLICATE 2
SO Proceedings of the National Academy of Sciences of the United States of America, Apr 25, 2000. Vol. 97, No. 9. p. 4979-4984
Publisher: Washington, D.C. : National Academy of Sciences,
CODEN: PNASA6; ISSN: 0027-8424

=> d 10 ab

L14 ANSWER 10 OF 12 AGRICOLA DUPLICATE 3

```
=> d 10 so

L14  ANSWER 10 OF 12  AGRICOLA                              DUPLICATE 3
SO   Nucleic acids research, Sept 1, 2000. Vol. 28, No. 17. p. 3250-3259
     Publisher: Oxford : Oxford University Press.
     CODEN: NARHAD; ISSN: 0305-1048


=> d 11 ab

L14  ANSWER 11 OF 12  CAPLUS  COPYRIGHT 2002 ACS
AB   Unavailable


=> d 11 so

L14  ANSWER 11 OF 12  CAPLUS  COPYRIGHT 2002 ACS
SO   (1998) 137 pp.  Avail.: UMI, Order No. DA9907518
     From: Diss. Abstr. Int., B 1999, 59(9), 4638


=> s cmt1
L15         173 CMT1

=> s l15 and methyltransferase
L16           7 L15 AND METHYLTRANSFERASE

=> dup rem l16
PROCESSING COMPLETED FOR L16
L17           3 DUP REM L16 (4 DUPLICATES REMOVED)

=> d 1-3 ti

L17  ANSWER 1 OF 3  AGRICOLA                               DUPLICATE 1
TI   Maize chromomethylase Zea methyltransferase2 is required for CpNpG
     methylation.

L17  ANSWER 2 OF 3  CAPLUS  COPYRIGHT 2002 ACS          DUPLICATE 2
TI   The Candida albicans gene for mRNA 5'-cap methyltransferase:
     identification of additional residues essential for catalysis

L17  ANSWER 3 OF 3  CAPLUS  COPYRIGHT 2002 ACS          DUPLICATE 3
TI   A DNA methyltransferase homolog with a chromodomain exists in
     multiple polymorphic forms in Arabidopsis


=> d 3 ab

L17  ANSWER 3 OF 3  CAPLUS  COPYRIGHT 2002 ACS          DUPLICATE 3
AB   Chromodomains are thought to mediate protein-protein interactions between
     chromatin components.  The authors have detected a chromodomain embedded
     within the catalytic region of a predicted Arabidopsis DNA
     methyltransferase that is diverged from other eukaryotic enzymes.
     The 791 residue "chromomethylase" (CMT1) is encoded by a floral
     transcript that is spliced from 20 exons and is present at only
     .apprx.1/10-7 of total mRNA.  Genomic sequencing reveals an ancient
     haplotype split at CMT1 between Col-0 + Metz and the other
     ecotypes examd.  In the Col-0 + Metz haplotype, alternative mRNA
     processing at intron 13 truncates the coding region.  In Ler, RLD, and
     No-0, similar truncation is caused by insertion of an intact
     retrotransposon, Evelknievel, which is present as a single copy in Ler and
     RLD and is currently methylated and inactive.  Evelknievel is found at
     this site on a single branch that connects the Ler, RLD, and No-0 ecotypes
```

but is absent from the genomes of all other ecotypes examd. A stop codon within exon 6 of the Metz ecotype confirms that **CMT1** is nonessential. Nevertheless, comparison to **CMT1** of Cardaminopsis arenosa, an outcrossing relative, indicates conservation for DNA **methyltransferase** function. The authors discuss how allelic diversity of **CMT1** may reflect loosened selective constraints in a self-fertilizing species such as Arabidopsis thaliana.